

In the Specification

At page 1, lines 5-7 below the header Related Patent Documents, please amend the paragraph as follows:

This is a continuation of U.S. Patent Application No. 09/665,646, filed on September 19, 2000, now U.S. Patent No. 6,351,684 issued on February 26, 2002 ~~and bearing the same title;~~ priority to which is claimed under 35 U.S.C. §120.

At page 3, lines 6-21, please amend the paragraph (lines 14-15) as follows:

Many of the problems faced in managing reticles also apply to the management, handling and use of solder bump masks. A solder bump mask is another type of mask used in the manufacture of flip chips that is delicate and needs to be handled carefully. In the solder interconnect process, typically known as the controlled-collapse chip connection (C4) process, a pattern of solder bumps is deposited on a wettable conductive terminal of a flip chip. The solder bump pattern is then coupled to a substrate and reflowed to create an electrical and mechanical connection from the chip to the substrate. The solder bumps are typically formed by evaporating lead (Pb) through openings in a molybdenum mask that is clamped to the wafer. A laser is used ~~Using a laser~~ to form many holes corresponding to the individual chip contacts on the wafer to form ~~forms~~ the mask. Solder bump masks tend to wear down more quickly than reticles due to the frequency of use and the cleanings with harsh chemicals. To ensure consistency in precision in the formation of the solder bump pattern, solder bump masks are discarded regularly. However, most solder bump masks are discarded prematurely since a closer inspection would indicate that the bump masks are still suitable for use, hence an increased cost in the manufacture of flip chip devices in not using a viable chip processing component.

At page 6, lines 21-27, please amend the paragraph as follows:

For further details on the reticle management system and reticle sorting equipment, reference is made to pending application entitled “ Integrated Reticle Sorter with Stocker,” having Serial No. 09/545,768 and filed on April 10, 2000, now U.S. Patent No. 6,457,587 and which is herein incorporated by reference. For further details on the management of solder bump masks, reference is made to the pending application entitled “Selection and Storage of Solder Bump Masks for a Solder Patterning Process,” having Serial No. 09/567,515 and filed on May 9, 2000, which is herein incorporated by reference.

At page 8, lines 17-26, please amend the paragraph as follows (by removing the extra period after *etc.*):

Referring to FIGS. 4A and 4B, tables 400A and 400B illustrate example portions of mask and reticle data sets, respectively, that are stored in the computer database of the mask identification server 202. In particular, table 400A illustrates how each mask is paired or matched with a particular pod (Mask1/Pod1; Mask4/Pod2; *etc.* [etc..]), as well as matching their respectively identification codes (not shown). As each pair moves to a new location or tool located within the plant, the event and location are documented and tied to the data set, thereby creating the historical map of the mask movements throughout the useful life of the mask. Table 400B of FIG. 4B, provides a similar illustration of the data gathered in the case of a reticle that moves about a photolithography area.

At pages 8-9, lines 27-31 and 1-2 respectively, please amend the paragraph as follows:

This method is also applicable to solder bump masks that are moved from storage to different processing areas in the plant. Due to the contact nature and the multiple cycling of the bump masks, tracking and reducing handling of the masks becomes more critical. With respect to reticles, tracking the condition of the reticles is important to ensure that the projected exposure (stacking issue) is within tolerance and the alignment remains ~~remain~~ within tolerance. The regular feedback of data back to the MCS helps to anticipate when out of tolerance/specification issues will start to affect production.